

Lab 6 - Requirements Analysis

Friday, April 10, 2020 4:27 PM

Communication Requirements:

- Input character from a terminal via the UART
- Output characters to the LCD display via the SPI interface

Data Handling Requirements

Part 1:

- The first 16 characters are displayed on the first line of the LCD display
 - If a CR is entered before 16 characters are input, move to the second line right away
- Once 16 character are input, or a CR is received, begin displaying characters on the second line of the LCD display
- When 16 characters are input, or a CR is entered, stop displaying characters

Part 2:

- When 16 characters are input, or a CR is detected, while displaying data on the second line, move the data on the second line of the LCD display to the first line, and begin displaying the new characters on the second line.
- Continue to move data from the second line to the first in a repetitive manner

Required Interfaces (I/O)

SPI to LCD Display

UART to terminal